



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
PETERBILT 345 (S/N 1NPCL40X1ND817799)

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0755483	WC0755467	WC0722183
Sample Date		Client Info		13 Apr 2023	17 Jan 2023	08 Aug 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	26	43	69
Chromium	ppm	ASTM D5185m	>4	2	2	2
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	39	70	48
Lead	ppm	ASTM D5185m	>45	2	2	3
Copper	ppm	ASTM D5185m	>85	2	7	31
Tin	ppm	ASTM D5185m	>4	<1	2	4
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

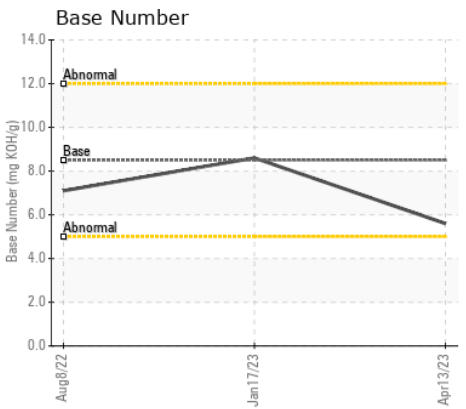
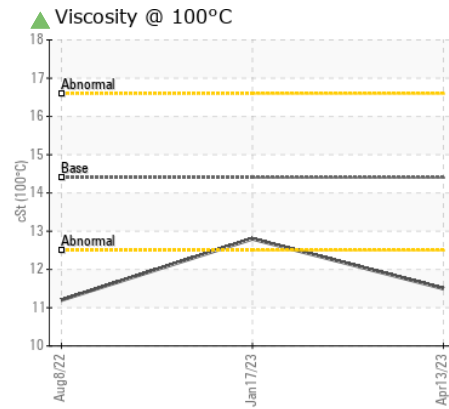
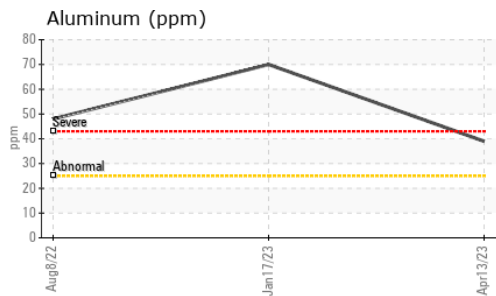
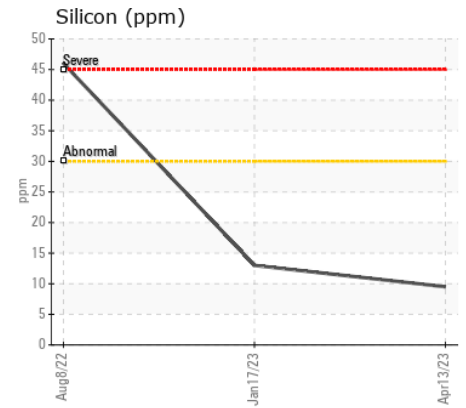
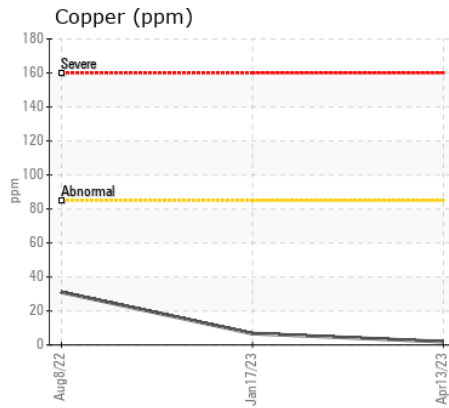
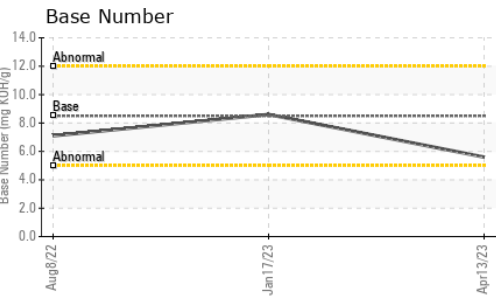
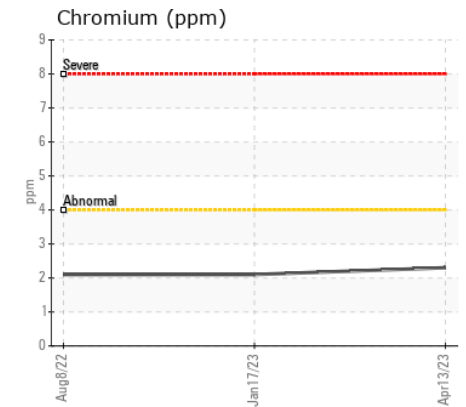
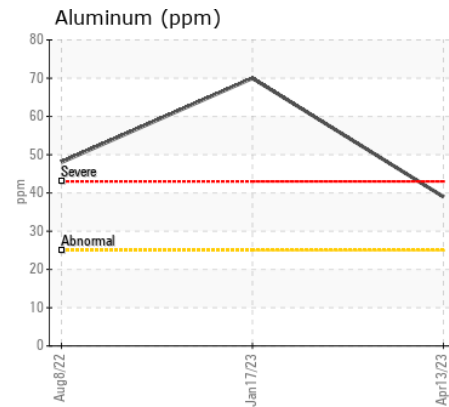
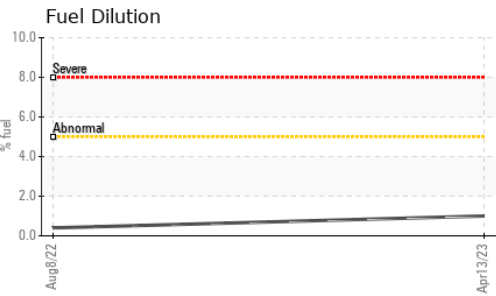
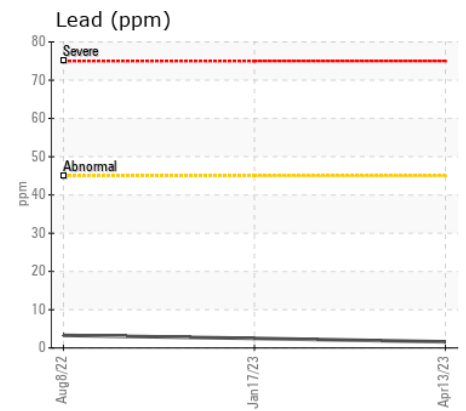
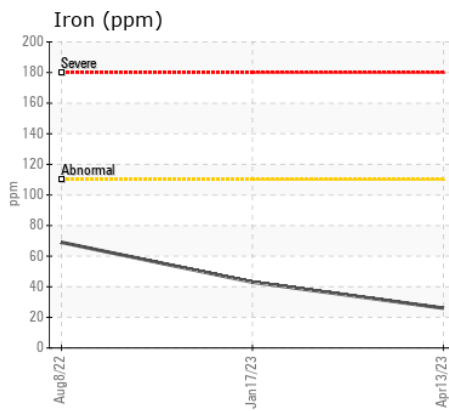
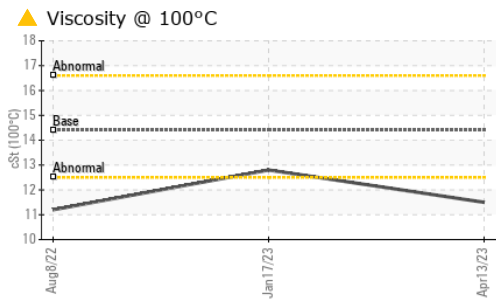
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	10	13	▲ 46
Potassium	ppm	ASTM D5185m	>20	86	191	166
Fuel	%	ASTM D3524	>5	1.0	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	5.9	9.1	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.2	20.5	22.9
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>216	6	3	8
Boron	ppm	ASTM D5185m	250	17	5	56
Barium	ppm	ASTM D5185m	10	1	<1	7
Molybdenum	ppm	ASTM D5185m	100	11	56	12
Manganese	ppm	ASTM D5185m		<1	2	7
Magnesium	ppm	ASTM D5185m	450	44	928	667
Calcium	ppm	ASTM D5185m	3000	2184	1086	1269
Phosphorus	ppm	ASTM D5185m	1150	854	942	648
Zinc	ppm	ASTM D5185m	1350	1084	1187	784
Sulfur	ppm	ASTM D5185m	4250	2953	3269	2591
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.8	15.7	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.6	8.6	7.1
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.5	12.8	11.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0755483 **Received** : 20 Apr 2023
Lab Number : 05825445 **Diagnosed** : 25 Apr 2023
Unique Number : 10433528 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.
* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)